



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live.*

Frank O'Bannon  
Governor

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Commissioner

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April 22, 2003

Mr. Ronald Maurer  
Century Marble Company, Inc.  
3525 State Road 32 West  
Westfield, Indiana 46074

Re: 057-17267-00045  
First Administrative Amendment to  
FESOP 057-15198-00045

Dear Mr. Maurer:

Century Marble Company, Inc. was issued a FESOP on January 6, 2003 for the operation of a stationary fiberglass marble fixtures and flat marble surfaces manufacturing source. A letter was received on February 24, 2003 requesting the following:

The one (1) gel coat repair spray booth, identified as Booth #2 (ID No. 003), exhausting at one (1) stack, identified as EP003 was removed from the FESOP (F057-15198-00045) as a result of public comment. The equipment associated with this booth is actually operating in existing Booth #1 (ID No. 007). Even though the existing Booth #1 will be using more coating (from 14.36 gal/hr to 23.46 gal/hr), the potential emissions from the spray booth remain the same since the emissions are limited by Condition D.1.1. The change to the permit proposed by the source can be considered descriptive change only. Appendix A, pages one (1) through three (3) outline the potential emissions for all equipment operating in Booth #1. Pursuant to the provisions of 326 IAC 2-8-10(a)(6) the permit is hereby administratively amended as follows:

## A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This stationary source consists of the following emission units and pollution control devices:

- (a) one (1) gel coat spray booth, identified as Booth #1 (ID No. 007), utilizing an air atomized application system, coating marble fixtures using a maximum of ~~14.36~~ **23.46** gallons per hour of gel coat, with dry filters for overspray control, and exhausting at one (1) stack, identified as EP007;
- (b) one (1) open fiberglass marble fixture manufacturing process, consisting of open resin blenders (ID No. 009), utilizing a flowcoating application system, using a maximum of 15.0 gallons per hour of resin, exhausting at one (1) stack, identified as EP009;
- (c) one (1) closed fiberglass marble panel manufacturing process, consisting of closed resin blenders (ID No. 005), utilizing a flowcoating application system, using a maximum of 15.0 gallons per hour of resin, exhausting at one (1) stack, identified as EP005;
- (d) one (1) fiberglass marble panel sanding and cutting booth (ID No. 006), utilizing one (1) drum sander, with Toritt cartridge dust collectors for particulate matter control, exhausting through one (1) stack, identified as EP006;
- (e) one (1) fiberglass marble fixture grinding booth (ID No. 008), utilizing hand grinders, with Toritt cartridge dust collectors for particulate matter control, exhausting through one (1) stack, identified as EP008, which vents internally; and

- (f) one (1) No. 2 distillate fuel oil fired boiler (ID No. 004), rated at 2.05 million (MM) British thermal units (Btu) per hour, exhausting through one (1) stack, identified as EP004.

## SECTION D.1 FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (a) one (1) gel coat spray booth, identified as Booth #1 (ID No. 007), utilizing an air atomized application system, coating marble fixtures using a maximum of ~~44.36~~ **23.46** gallons per hour of gel coat, with dry filters for overspray control, and exhausting at one (1) stack, identified as EP007;
- (b) one (1) open fiberglass marble fixture manufacturing process, consisting of open resin blenders (ID No. 009), utilizing a flowcoating application system, using a maximum of 15.0 gallons per hour of resin, exhausting at one (1) stack, identified as EP009;
- (c) one (1) closed fiberglass marble panel manufacturing process, consisting of closed resin blenders (ID No. 005), utilizing a flowcoating application system, using a maximum of 15.0 gallons per hour of resin, exhausting at one (1) stack, identified as EP005.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

All other conditions of the permit shall remain unchanged and in effect. Please attach a copy of this amendment and the following revised permit pages to the front of the original permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Linda Quigley, c/o OAQ, 100 North Senate Avenue, P.O. Box 6015, Indianapolis, Indiana, 46206-6015, or call (973) 575-2555, extension 3284, or dial (800) 451-6027, press 0 and ask for extension 3-6878.

Sincerely,

Original signed by Paul Dubenetzky  
Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Quality

### Attachments

LQ/EVP

cc: File - Hamilton County  
U.S. EPA, Region V  
Hamilton County Health Department  
Air Compliance Section Inspector - Marc Goldman  
Compliance Data Section - Karen Nowak  
Administrative and Development  
Technical Support and Modeling - Michelle Boner



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## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) OFFICE OF AIR QUALITY

**Century Marble Company, Inc.  
3525 State Road 32 West  
Westfield, Indiana 46074**

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: F057-15198-00045	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Quality	Issuance Date: January 6, 2003  Expiration Date: January 6, 2008

First Administrative Amendment: 057-17267	
Issued by: Original signed by Paul Dubenetzky Paul Dubenetzky, Branch Chief Office of Air Management	Pages affected: 5, 24 Issuance Date: April 22, 2003

## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)]

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The Permittee owns and operates a stationary fiberglass marble fixtures and flat marble surfaces manufacturing source.

Authorized individual:	President
Source Address:	3525 State Road 32 West, Westfield, Indiana 46074
Mailing Address:	3525 State Road 32 West, Westfield, Indiana 46074
General Source Phone:	317-867-5555
SIC Code:	3088
Source Location Status:	Hamilton
Source Status:	Attainment for all criteria pollutants Federally Enforceable State Operating Permit (FESOP) Minor Source, under PSD Rules; Minor Source, Section 112 of the Clean Air Act

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

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This stationary source consists of the following emission units and pollution control devices:

- (a) one (1) gel coat spray booth, identified as Booth #1 (ID No. 007), utilizing an air atomized application system, coating marble fixtures using a maximum of 23.46 gallons per hour of gel coat, with dry filters for overspray control, and exhausting at one (1) stack, identified as EP007;
- (b) one (1) open fiberglass marble fixture manufacturing process, consisting of open resin blenders (ID No. 009), utilizing a flowcoating application system, using a maximum of 15.0 gallons per hour of resin, exhausting at one (1) stack, identified as EP009;
- (c) one (1) closed fiberglass marble panel manufacturing process, consisting of closed resin blenders (ID No. 005), utilizing a flowcoating application system, using a maximum of 15.0 gallons per hour of resin, exhausting at one (1) stack, identified as EP005;
- (d) one (1) fiberglass marble panel sanding and cutting booth (ID No. 006), utilizing one (1) drum sander, with Toritt cartridge dust collectors for particulate matter control, exhausting through one (1) stack, identified as EP006;
- (e) one (1) fiberglass marble fixture grinding booth (ID No. 008), utilizing hand grinders, with Toritt cartridge dust collectors for particulate matter control, exhausting through one (1) stack, identified as EP008, which vents internally; and
- (f) one (1) No. 2 distillate fuel oil fired boiler (ID No. 004), rated at 2.05 million (MM) British thermal units (Btu) per hour, exhausting through one (1) stack, identified as EP004.

## SECTION D.1

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-8-4(10)]:

- (a) one (1) gel coat spray booth, identified as Booth #1 (ID No. 007), utilizing an air atomized application system, coating marble fixtures using a maximum of 23.46 gallons per hour of gel coat, with dry filters for overspray control, and exhausting at one (1) stack, identified as EP007;
- (b) one (1) open fiberglass marble fixture manufacturing process, consisting of open resin blenders (ID No. 009), utilizing a flowcoating application system, using a maximum of 15.0 gallons per hour of resin, exhausting at one (1) stack, identified as EP009;
- (c) one (1) closed fiberglass marble panel manufacturing process, consisting of closed resin blenders (ID No. 005), utilizing a flowcoating application system, using a maximum of 15.0 gallons per hour of resin, exhausting at one (1) stack, identified as EP005.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

### Emission Limitations and Standards [326 IAC 2-8-4(1)]

#### D.1.1 Volatile Organic Compounds (VOCs)[326 IAC 8-1-6][326 IAC 2-8-4][40 CFR 52.21][326 IAC 2-2]

Use of resins and gel coats in the one (1) gel coat spray booth (ID No. 007), the open resin blenders (ID No. 009), and the closed resin blenders (ID No. 005) shall be limited such that the potential to emit (PTE) volatile organic compounds (VOC) shall be less than 25 tons per twelve (12) consecutive month period, where compliance is determined at the end of each month. Compliance with this limit for resins and gel coats shall be determined based upon the following criteria:

- (a) Monthly usage by weight, weight percent monomer content that is VOC, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. VOC emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
- (b) Until such time that new emissions information is made available by U.S. EPA in its AP-42 document or other U.S. EPA-approved form, emission factors shall be taken from the following reference approved by IDEM, OAQ: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001, with the exception of the emission factors for controlled spray application. For operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.

Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply. This limit also renders 326 IAC 2-7 (Part 70 Permit Program) and 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

**Appendix A: Emission Calculations****HAP Emissions - Potential To Emit**

**Company Name:** Century Marble Company, Inc.  
**Address City IN Zip:** 3525 State Road 32 West, Westfield, Indiana 46074  
**Administrative Amendment:** 057-17267-00045  
**Reviewer:** Linda Quigley/EVP  
**Date:** April 2, 2003

Potential To Emit											
Material	Density (lb/gal)	Max. Gallons per hour	Emission Factor  lb styrene per ton gelcoat/resin processed	Weight % Styrene	Weight % Toluene	Weight % Xylene	Weight % Cumene	Styrene Emissions  (tons/yr)	Toluene Emissions  (tons/yr)	Xylene Emissions  (tons/yr)	Cumene Emissions  (tons/yr)
<b>Booth #1</b>											
Gel Coat	9.12	14.36	605	48.00%	0.00%	0.00%	0.00%	173.57	0.00	0.00	0.00
S-0280 Solvent	8.86	0.20	100%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
<b>Additional usage</b>											
Gel Coat	9.12	9.10	605	48.00%	0.00%	0.00%	0.00%	109.97	0.00	0.00	0.00
S-0280 Solvent	8.86	0.02	100%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00
								283.54	0.00	0.00	0.00

**Total Potential Emissions:** 283.54

Methodology:

HAPs emission rate (tons/yr) = density (lb/gal) \* (gal/hour) \* weight % HAP \* emission factor \* (8,760 hrs/yr) \* (1 ton/2,000 lb)

Emission Factors are based on the Unified Emission Factors for Open Molding of Composites, developed by the CFA for the Reinforced Plastics Industries, July 23, 2001.

**Appendix A: Emission Calculations****HAP Emissions - Potential To Emit**

**Company Name:** Century Marble Company, Inc.  
**Address City IN Zip:** 3525 State Road 32 West, Westfield, Indiana 46074  
**Administrative Amendment:** 057-17267-00045  
**Reviewer:** Linda Quigley/EVP  
**Date:** April 2, 2003

Limited Emissions												
Material	Density (lb/gal)	Max. Gallons per hour	Emission Factor  lb styrene per ton gelcoat/resin processed	Weight % Styrene	Weight % Toluene	Weight % Xylene	Weight % Cumene	Material Usage  Limitation	Styrene Emissions  (tons/yr)	Toluene Emissions  (tons/yr)	Xylene Emissions  (tons/yr)	Cumene Emissions  (tons/yr)
<b>Booth #1</b>												
Gel Coat	9.12	14.36	605	48.00%	0.00%	0.00%	0.00%	3.00%	5.21	0.00	0.00	0.00
S-0280 Solvent	8.86	0.20	100%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00	0.00	0.00	0.00
<b>Additional Usage</b>												
Gel Coat	9.12	9.10	605	48.00%	0.00%	0.00%	0.00%	3.00%	3.30	0.00	0.00	0.00
S-0280 Solvent	8.86	0.02	100%	0.00%	0.00%	0.00%	0.00%	3.00%	0.00	0.00	0.00	0.00
									<b>8.51</b>	0.00	0.00	0.00

**Limited Emissions:** **8.51**

Methodology:

HAPs emission rate (tons/yr) = density (lb/gal) \* (gal/hour) \* weight % HAP \* emission factor \* (8,760 hrs/yr) \* (1 ton/2,000 lb)

At a 3.00% material usage limit, single HAP and total HAP emissions are limited to less than 10 and 25 tons per year, respectively, based on 8,760 hours per year operation.

Emission Factors are based on the Unified Emission Factors for Open Molding of Composites, developed by the CFA for the Reinforced Plastics Industries, July 23, 2001.

**Appendix A: Emissions Calculations**  
**Form DD: Reinforced Plastics and Composites**  
**Fiberglass Processes**

**Company Name:** Century Marble Company, Inc.  
**Address City IN Zip:** 3525 State Road 32 West, Westfield, Indiana 46074  
**Administrative Amendment:** 057-17267-00045  
**Reviewer:** Linda Quigley/EVP  
**Date:** April 2, 2003

<b>Potential Uncontrolled Emissions:</b>										
Material (as applied)	Density (Lb/Gal)	Weight % Styrene Monomer or VOC	Emission Factor lb styrene per ton gelcoat/ resin processed	Gal of Mat (gal/hr)	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential ton/yr	lb VOC /gal solids	Transfer Efficiency
<b>Gel Coat Booth #1</b>										
Gel Coat	9.12	48.00%	605	14.36	39.62	950.79	173.52	149.14	n/a	50%
S-0280 Solvent	8.86	100.00%	100.00%	0.20	1.77	42.53	7.76	0.00	n/a	100%
<b>Additional Usage</b>										
Gel Coat	9.12	48.00%	605	9.10	25.11	602.52	109.96	94.51	n/a	50%
S-0280 Solvent	8.86	100.00%	100.00%	0.02	0.18	4.25	0.78	0.00	n/a	100%
Total Uncontrolled Potential to Emit:					66.67	1600.10	292.02	243.65		
				Input Usage Limitation	Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr	PM Control Efficiency	
				VOC						
				3.00%	2.00	48.00	8.76	4.87	98.00%	
Total Controlled Potential to Emit:										

**Methodology:**

Potential VOC Pounds per Hour = Density of coating (lb/gal) \* Gal of Material (gal/hour) \* Emission Factor

Potential VOC Pounds per Day = Density of coating (lb/gal) \* Gal of Material (gal/hour) \* (24 hr/day) \* Emission Factor

Potential VOC Tons per Year = Density of coating (lb/gal) \* Gal of Material (gal/hour) \* (8760 hr/yr) \* (1 ton/2000 lbs) \* Emission Factor

Particulate Potential Tons per Year = (gal/hour) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids) \* Transfer Efficiency

Total = Sum of the coatings + all solvents used

Controlled emission rate = uncontrolled emission rate \* Input Usage Limitation (expressed as percent of potential input)

Total VOC input usage will be limited to 3.00% of potential input usage based on 8,760 hours per year operation in order to limit Single HAP and Total HAPs to less than 10 tpy and 25 tpy, respectively. This limit will also render the requirements of 326 IAC 8-1-6 (BACT) not applicable.

Emission Factors are based on the Unified Emission Factors for Open Molding of Composites, developed by the CFA for the Reinforced Plastics Industries, July 23, 2001.